

## **D&D Subgroup Highlights**

### **November 13, 1996**

#### **Introduction**

Rich Gonzalez stated that the 10-year plan has been delayed until March. The purpose of this meeting is to begin work on prioritizing the Hanford D&D technology needs for submittal to the STCG management council in December. The needs list that we develop will be sent to METC but the list will also be on the Hanford and ETP homepages for vendors and others to respond to. In addition, all STCGs in the DOE Complex will get a copy as well as all the Focus Areas.

#### **Technology Needs Discussion**

Jackie Vander Veen presented information and led a discussion on the following fourteen D&D technology needs obtained from EM-60 personnel:

1. Plutonium decontamination of piping and duct work.
2. Plutonium decontamination of steel flooring system consisting of 3'x5' trays and 3" ledges.
3. Fixative for alpha contamination that has >ten year life and no moderating effects.
4. Liquid metal cold trap disposition - either safe technology or operating facility.
5. Removal of NaK heel from spent fuel storage facility cooling loop.
6. Final disposition of 4,600 gallons of radioactively contaminated combustible organic solvents.
7. Safe technique for dismantlement of a radioactivity contaminated stack.
8. Volume reduction for 55 gallon drums filled with 15,000 curies and/or 200 kilograms of waste.
9. A method for quickly identifying leaking Cs or Sr capsules stored in WESF.
10. Dry, benign (inexpensive) method for storing Sr and Cs capsules.
11. Sr and Cs removal or stabilization within a 24-inch duct that has potential for severely contaminating the K3 filter.
12. Underwater cement decontamination technique for alpha, beta, and gamma contamination that will not cloud the basin water or create an overly rough surface.
13. Decontamination and recycling of modular cast iron cells contaminated with alpha, beta, and gamma.
14. Methods for accurately determining alpha contamination (plutonium) using NDA techniques are needed to determine accumulations of Pu in varying containers.

During the discussion of the needs, the following actions were agreed to by the subgroup:

- Need #6 was seen as a MW need, not a D&D need, and was dropped from the list;
- Needs #7, 8, and 11 were seen as too small to warrant further consideration or as not being "true" technology needs;
- All of the decontamination needs should be packaged together (#1, 2, 12, and 13).

Sue Garrett then presented information and led a discussion on the following eighteen D&D technology needs obtained from EM-40 personnel:

1. Improved water visibility in the N-Basin
2. Sediment/Slurry Removal
3. Sediment Separation from Water
4. Inexpensive, Lightweight Roofing Material
5. Roof Enhancer
6. Quick Response Problem Solver
7. Physical Stress Monitoring System
8. D&D Data Management System
9. Reactor Core Stabilization
10. Bio-control
11. Field Identification of Asbestos
12. Asbestos Containing Material Packaging Device
13. Chicken Wire Cutter Power Tool
14. Mechanical Assisted Tar Scraper
15. Remote Cutting Tool for Asbestos and Material Asbestos is on
16. Remote Grappling/Securing/Manipulating Device for Asbestos Covered Material
17. Waste Segregation Surveying Device
18. Waste Reduction and Recycling of Metals

During the discussion of the needs, the following actions were agreed to by the subgroup:

- Needs #2 and 3 were eliminated from consideration;
- Needs #6 and 8 were also eliminated as they are not technology needs per se;
- Need #14 was seen as too small to be considered any further;
- Needs #12, 15, and 16 are to be combined into one asbestos handling/packaging need.

In addition to the changes to the needs list noted above, Jackie and Sue were asked to review last year's needs list to make sure that the canyon facility, glove box, and hot cell needs were all included in the next version of the needs. Jackie and Sue are to get more information put together on these needs and send out to all subgroup members.

### Wrap Up

Jim Goodenough mentioned that he was looking at joint EM-40 and EM-50 projects. T-Plant is working out the CO<sub>2</sub> blasting issues. Rocky Flats won the glove box proposal/large scale demo from METC. Hanford will have members on the IC team. This may involve a video teleconference once a month and a quarterly face-to-face visit. The Corpex demo at Savannah River is delayed until January and a demo at PFP will probably take place within six months.

The next meeting, to prioritize the D&D technology needs, is scheduled for 7:30am on December 3 in the EESB, Stampede Room.

### Meeting Attendees

Gary Ballew (ETP)  
Ron Borisch (B&WHC)  
Greg Eidam (BHI)  
Sue Garrett (PNNL)  
Rick Gonzalez (DOE-RL/TPD)  
Jim Goodenough (DOE-RL/AME)  
Bob Julian (Ecology)  
Loni Peurrung (PNNL)  
Steve Pulsford (BHI)  
Shannon Saget (DOE-RL)  
Nancy Uziemblo (Ecology)  
Jackie Vander Veen (PHMC/FDH)  
Steve Weakley (PNNL)  
Jerry White (DCR/TCCP)